PA NT COOPERATION TREAT

From the	- INTER	NATIONA	RURFAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

Commissioner

US Department of Commerce United States Patent and Trademark

Office, PCT

2011 South Clark Place Room

CP2/5C24

Arlington, VA 22202

ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 01 November 2000 (01.11.00)

International application No.

Applicant's or agent's file reference PCT/US00/08519 OCR-1001

International filing date (day/month/year) 30 March 2000 (30.03.00)

Priority date (day/month/year) 31 March 1999 (31.03.99)

Applicant

CAPPELLO, Michael et al

1.	The designated Office is hereby notified of its election made:
	X in the demand filed with the International Preliminary Examining Authority on:
	29 September 2000 (29.09.00)
	in a notice effecting later election filed with the International Bureau on:
2.	The election X was
	was not
	made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Charlotte ENGER

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35



From the INTERNATIONAL SEARCHING AUTHORITY

To: MARY M. KRINSKY 79 TRUMBULL STREET

PCT

79 TRUMBULL STREET PROPER CT 06511-3708 PROPER CT 06511-3708	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION (PCT Rule 44.1) Date of Mailing (day/month/year) 05 JUL 2000	
Applicant's or agent's file reference	FOR FURTHER ACTION See paragraphs 1 and 4 below	
OCR-1001 International application No.	International filing date (day/month/year) 30 MARCH 2000	
PCT/US00/08519 Applicant YALE UNIVERSITY		
Filing of amendments and statement under Arts The applicant is entitled, if he so wishes, to amend When? The time limit for filing such amend international search report; however, for Where? Directly to the International Bureau of 34, chemin des Colom 1211 Geneva 20, Swit Facsimile No.: (41-22) For more detailed instructions, see the notes	iments is normally 2 months from the date of transmittal of the or more details, see the notes on the accompanying sheet. EWIPO bettes zerland 0 740.14.35 on the accompanying sheet.	
Article 1/(2)(8) to that officer is	onal search report will be established and that the declaration under vith.	
3. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that the protest together with the decision thereon has been transmitted to the International Bureau together with the protest together with the decision thereon to the designated Office applicant's request to forward the texts of both the protest and the decision thereon to the designated Office no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.		
priority claim, must reach the International Burea completion of the technical preparations for international properties of the priority date, a demand within 19 months from the entry into the national ph	remational application will be published by ation, a notice of withdrawal of the international application, or of the ation, a notice of withdrawal of the international application, as provided in rules 90 bis 1 and 90 bis 3, respectively, before the national publication. The provided in the applicant are until 30 months from the priority date (in some Offices even later), are until 30 months from the priority date (in the national phase before the priority definition the demand or in a later election within 19 months from the priority date.	
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer HOLLY SCHNIZER Telephone No. (703) 308-0196	

Facsimile No. (703) 305-3230



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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference OCR-1001		Transmittal of International Search Report 20) as well as, where applicable, item 5			
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)			
PCT/US00/08519	30 MARCH 2000	30 MARCH 1999			
Applicant YALE UNIVERSITY					
according to Article 18. A copy is bein	prepared by this International Searching Auti g transmitted to the International Bureau.	nority and is transmitted to the applicant			
This international search report consists	of a total of 3 sheets.				
X It is also accompanied by a c	copy of each prior art document cited in this	report.			
1. Basis of the report					
	e international search was carried out on the ba	sis of the international application in the			
	unless otherwise indicated under this item. carried out on the basis of a translation of t	he international application furnished to this			
 b. With regard to any nucleotide was carried out on the basis of 		nternational application, the international search			
X contained in the internations	al application in written form.				
X filed together with the intern	national application in computer readable form	n.			
furnished subsequently to this Authority in written form.					
furnished subsequently to this Authority in computer readable form.					
	the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the				
international application as the statement that the information	filed has been furnished. ation recorded in computer readable form is ide	entical to the written sequence listing has been			
	i unsearchable (See Box I).				
3. Unity of invention is lack	ing (See Box II).				
4. With regard to the title,					
X the text is approved as sub-	nitted by the applicant.				
the text has been established	d by this Authority to read as follows:				
5. With regard to the abstract,					
X the text is approved as sub-	mitted by the applicant.				
	d, according to Rule 38.2(b), by this Authori within one month from the date of mailing o ents to this Authority.				
6. The figure of the drawings to be p	ublished with the abstract is Figure No. 1				
X as suggested by the applica	nt.	None of the figures.			
because the applicant failed	to suggest a figure.				
because this figure better cl	naracterizes the invention.				

CLASSIFICATION OF SUBJECT MATTER IPC(7) :C07K 1/00, 14/00; A61K 38/00 US CL :514/2, 822; 530/350 ccording to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 514/2, 822; 530/350 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Extra Sheet.	
PC(7): C07K 1/00, 14/00; A6TK 38/00 PS CL: 514/2, 822; 530/350 Coording to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Inimum documentation searched (classification system followed by classification symbols) J.S.: 514/2, 822; 530/350 Coumentation searched other than minimum documentation to the extent that such documents are included in the fields searched coumentation searched other than minimum documentation to the extent that such documents are included in the fields searched electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Extra Sheet.	
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DOCUMENTS CONSIDERED TO BE RELEVANT Sthe relevant passages Relevant to claim	No.
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Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim The NORTHNGHAM 11 May 12 and 16-19	
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	B. FIELDS SEARCHED Electronic data bases consulted (Name of data base and where practicable terms used):				
	STN (MEDLINE, BIOSIS, CAPLUS); EAST; search terms: GPIIb/IIIa, GPIa/IIa, fibrinogen, collagen, ancyclostoma duodenale, ancyclostoma ceylanicum, necator americus, ancyclostoma canimum, hookworm, platelet inhibition, epinephrine, thrombin, ADP, apyrase.				

PTOPET Rec'd 25 SEP 01 PATENT COOPERATION TREATY

MARY M. KRINSKY 79 TRUMBULL STREET NEW HAVEN, CT 06511-3708 Applicant's or agent's file reference OCR-1001 International application No. International filing date (day/month/year) International application No. International filing date (day/month/year) International application No. International application No. International application No. International price (day/month/year) International application No. International Price (day/month/year) International Price (day/mon	From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY	
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Applicant's or agent's file reference REPLY DUE within 1 months/days from the above date of maining December Corn. 1001 International application No. International filing date (day/month/year) Priority date (day/month/year) All March 1999 (31.03.1999) International Patent Classification (IPC) or both national classification and IPC IPC(7): COTK 1/00, 14/00; A61K 38/00 and US Cl.: 514/2, 822; 530/350 Applicant YALE UNIVERSITY 1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority. 2. This opinion contains indications relating to the following items: Basis of the opinion		(PCT Rule 66)
Applicant s or agent s the reference within 1 months/days from the above date of mailling international application No. International filing date (day/month/year) Priority date (day/month/year) 30 March 2000 (30.03.2000) 31 March 1999 (31.03.1999)	(4	
International application No. PCT/US00/08519 30 March 2000 (30.03.2000) 31 March 1999 (31.03.1999) International Patent Classification (IPC) or both national classification and IPC IPC(7): COTK 1/00, 14/00; A61K 38/00 and US Cl.: 514/2, 822; 530/350 Applicant YALE UNIVERSITY 1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority. 2. This opinion contains indications relating to the following items: 1	Applicant's of agent's the reference	within 1 months/days from the above date of mailing
Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step and industrial applicability: Certain documents cited VII Certain defects in the international application VIII Certain defects of the very large of the amendments, see Rule 66.4 (4). Por the form and the language of the amendments, see Rule 66.4 and 66.9 For an additional opportunity to submit amendments, see Rule 66.4 For the caminer's obligation to consider amendments and/or arguments, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established according to Rule 69.2 is: 30 July 2001 (30.07.2001) Commissioner of Paens and Trasmants Stephen Tu PARALEGAL SPECIALIST		y/month/year) Priority date (day/month/year)
International Patent Classification (IPC) or both national classification and IPC IPC(T): COTK 1/00, 14/00; A61K 38/00 and US Cl.: 514/2, 822; 530/350 Applicant YALE UNIVERSITY 1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority. 2. This opinion contains indications relating to the following items:	20 3 4 1 2000 (20 03 2000	31 Maroh 1999 (31.03.1999)
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VIII Certain observations on the international application 3. The applicant is hereby invited to reply to this opinion. When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d). How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9. Also For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. 4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30 July 2001 (30.07.2001) Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Authorized officer Stephen Tu Parale EGAL SPECIALIST		
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How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 60.3. For the form and the language of the amendments, see Rules 66.8 and 66.9. Also For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. 4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30 July 2001 (30.07.2001) Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Stephen Tu PARALEGAL SPECIALIST	When? See the time limit indicated above. The	rule 66.2(4).
For the examiner's obligation to consider amendments and/or arguments, see Rule 60.4 bits. For an informal communication with the examiner, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. 4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30 July 2001 (30.07.2001) Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Stephen Tu PARALEGAL SPECIALIST	How? By submitting a written reply, accompant For the form and the language of the am	ied, where appropriate, by amendments, according to Rule 66.3. endments, see Rules 66.8 and 66.9.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30 July 2001 (30.07.2001) Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Stephen Tu PARALEGAL SPECIALIST	For the examiner's obligation to conside For an informal communication with the	examiner, see Rule 66.6
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Stephen Tu ParaleGAL SPECIALIST Commissioner of Patents and Trademarks Stephen Tu ParaleGAL SPECIALIST	If no reply is filed, the international preliminary exami	nation report will be established on the basis of this opinion.
Countries and Trademarks Countries and Trademarks Stephen Tu PARALEGAL SPECIALIST	4. The final date by which the international preliminary	
Commissioner of Patents and Trademarks Stephen Tu PARALEGAL SPECIALIST Stephen Tu	Name and mailing address of the IPEA/US	Authorized officer TERRY J. DEY
Washington, D.C. 20231	Commissioner of Patents and Trademarks	Stephen Tu PARALEGAL SPECIALIST
Facsimile No. (703)305-3230 Telephone No. 703-308-01990-0001	Washington, D.C. 20231	Telephone No. 703-3 TECHNOLOGY CENTER 1600

International application No.

WRITTEN OPINION

PCT/US00/08519

I.	Bas	is of the opinion	
1.	With	regard to the elements of the international application:*	7
	\boxtimes	the international application as originally filed	
	\boxtimes	the description:	1
		pages 1-25, as originally filed	ĺ
		pages NONE, filed with the demand pages NONE, filed with the letter of	
	5 3		
	\boxtimes	the claims:	
		pages 26 and 27 , as originally filed pages NONE , as amended (together with any statement) under Article 19	
		pages NONE , filed with the demand	
		pages NONE , filed with the letter of	
	\square	the drawings:	I
	لاجا	pages 1-5 as originally filed	I
		pages NONE , filed with the demand	l
		pages NONE , filed with the letter of	
	\boxtimes	the sequence listing part of the description:	İ
		pages 1-2, as originally filed	
		pages NONE , filed with the demand	١
_	*****	pages NONE , filed with the letter of	l
2.	Will langi	regard to the language, all the elements marked above were available or furnished to this Authority in the large in which the international application was filed, unless otherwise indicated under this item.	
	Thes	e elements were available or furnished to this Authority in the following language which is:	
		the language of a translation furnished for the purposes of international search (under Rule23.1(b)).	l
	\Box	the language of publication of the international application (under Rule 48.3(b)).	l
	\sqcap	the language of the translation furnished for the purposes of international preliminary examination(under Rules	l
		55.2 and/or 55.3).	l
3.	With	regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written	l
	obini	on was drawn on the basis of the sequence listing:	
	\mathbb{A}	contained in the international application in printed form.	
		filed together with the international application in computer readable form.	
	님	furnished subsequently to this Authority in written form.	
	\vdash	furnished subsequently to this Authority in computer readable form.	
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.	
	Ш	The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.	
4.		The amendments have resulted in the cancellation of:	
		the description, pages NONE	
		the claims, Nos. NONE	ĺ
		the drawings, sheets/fig NONE	
5. [This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go	
		beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).	
* R thic	eplac	ement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in on as "originally filed."	
	υρυπι	on the one of the one	
	DOT	URE LUCA (D. D. C. L. C.	



International application No. PCT/US00/08519

			PC1703007002	
WRITTEN OPINION Reasoned statement under Rule 66.2(a)(ii)			- Indus	trial applicability;
	-tab rogard	to novelty	, inventive step or maus	III app
Descend statement under Rule 66.2(a)(ii)	With regard			
Reasoned statement under Rule 66.2(a)(a) citations and explanations supporting such	Statement			
				YES
STATEMENT		20		NO
or the (N)	Claims	I-20		
Novelty (N)	Claims	NONE		vec.
			s 20	YES
C (IS)	Claims	1-11, 13, 1	5, 20	NO
Inventive Step (IS)	Claims	12, 14, 16	19	
				YES
	Claims	1-20		NO
Industrial Applicability (IA)	Claims	NONE		
CITATIONS AND EXPLANATIONS Claims 1-20 meet the criteria for novelty under POICLAIMS 1-11, 13, 15, and 20 meet the criteria for polypeptide of SEQ ID NO:2 or methods of treatment to inhibit platelet for polypeptide of SEQ ID NO:2 or methods of treatment or view of FURMIDGE et al., (Parasitology (19 excretory-secretory (ES) products of Necator and does not teach or suggest mechanism by which the ES products of N. Americanus inhibit with the interaction of fibrinogen with platelet at Claims 1-20 meet the criteria for industrial app. NEW CITATIONS NONE	novelty under ment to inhibit under PCT Art 95) 112: 81-87 nericanus, parti- these proteins in platelet aggreg illbB3, which A licability as def	PCT Article platelet func cle 33(3) as PRITCHA cularly as au hibit platele ation. Speci pplicant ha	s being obvious over PRITC ARD et al. teaches the pharm in inhibitor of platelet aggregation. FURMIDGE the taggregation of the transport of	e, as set forth in these claims HARD et al., WO95/12615 naceutical use of derivatives ation. However the reference

Form PCT/IPEA/408 (Box V) (July 1998)



International application No. PCT/US00/08519

	·	
WRITTEN OPINION		
Supplemental Box (To be used when the space in any of the preceding boxes is not sufficient)		
(To be used when the space in any of the precess of the used when the space in any of the precess of the time limit set for response to a Written Opinion may not be extended. 37 the time limit set for response to a Written Opinion will not be considered in expiration of the time limit set in the Written Opinion will not be considered in Report.	CFR 1.484(d). Any response received after the preparing the International Preliminary Examination	

PATENT COOPERATION TREATY

REC'D	15	MAR	2002
Misc			PCT

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

	(PC1 Article -		
- forence	ACTION	See Notificati	ion of Transmittal of International Examination Report (Form PCT/IPEA/416)
Applicant's or agent's file reference	FOR FURTHER ACTION		Priority date (day/month/year)
OCR-1001 International application No.	International filing date (day/mo	ium, is an i	31 March 1999 (31.03.1999)
International approximation	30 March 2000 (30.03.2000)		
PCT/US00/08519 International Patent Classification (IPC)	or national classification tale	•	
International Patent Classification (1977); C07K 1/00, 14/00; A61K 38/0	0 and US Cl.: 514/2, 822; 530/35	0	
IPC(7): C07K 1/00, 14/00, 7400 Applicant			
Applican			rianal Preliminary
YALE UNIVERSITY	mination report has b	oeen prepared	by this International Preliminary Article 36.
1. This international prelim	ninary examination report has been distransmitted to the applicar	n according to	5 Afficie 50.
Examining Additions	3 - includ	ing this cover	sheet.
2. This REPORT consists	and is transmitted to the application of a total of $\frac{3}{2}$ sheets, including		the description, claims and/or drawings d/or sheets containing rectifications made Administrative Instructions under the PCT).
a in also	accompanied by ANNEXES,	i.e., sheets or	the description, claims and/or drawing deal/or sheets containing rectifications made Administrative Instructions under the PCT).
This report is also	amended and are the basis for	on 607 of the	Administrative Instructions under and
hetore uns nume	,, ,		d/or sheets containing rectifications made Administrative Instructions under the PCT).
and consis	t of a total of <u>U</u> sheets.		
These autores	indications relating to the follow	wing items:	
.3. This report contains	Indications 144		•
Basis of th	ne report		
II Priority			enventive step and industrial applicability
II Priority	blishment of report with regard	to novelty, it	Active well
III Non-esta	min of invention		step or industrial
IV Lack of	unity of many under Article 35(2)	with regard t	o novelty, inventive step or industrial uch statement
V Reasone	d statement under Article 35(2) illiny; citations and explanations	supporting st	uch statemen
applicati	documents cited		
VI Certain	defects in the international app	dication	
VII Certain	observations on the internation	nal application	ı
VIII Certair	observations on the		
		Date of c	completion of this report
Date of submission of the C	lemard		2002 (26.02.2002)
		1/	and and ke
29 September 2000 (29,09.20	I IDEA/IIS	$\Lambda^{\prime\prime}$ Λ	toller Bridger &
Name and mailing address of Commissioner of Paents	and Trademarks	eninf of	111 131411
Box PCT - Washington, D.C. 202		Telepho	ne No. (703) 308-0196
Form PCT/IPEA:409 (cover	sheer)duly 12200		

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

'Q

International application No.	
PCT/US00/08519	

ı.	Basi	s of the report
1.	With	regard to the elements of the international application:*
	\boxtimes	the international application as originally filed.
	$\overline{\boxtimes}$	the description:
		pages 1-25 as originally filed
		pages NONE , filed with the demand
		pages NONE, filed with the letter of
	\boxtimes	the claims:
		pages 26 and 27, as originally filed
		pages NONE, as amended (together with any statement) under Article 19
		pages NONE , filed with the demand pages NONE , filed with the letter of
	\boxtimes	the drawings:
		pages 1-5, as originally filed
		pages NONE, filed with the demand pages NONE, filed with the letter of
	\boxtimes	the sequence listing part of the description:
		pages 1-2 as originally filed
		pages NONE, filed with the demand, filed with the letter of
_	3371.1	regard to the language, all the elements marked above were available or furnished to this Authority in the
<u>-</u> .	Vill	regard to the language, an the elements marked arove were available of realisated under this item.
	Thes	ie elements were available or furnished to this Authority in the following language which is:
		the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	H	the language of publication of the international application (under Rule 48.3(b)).
	H	the language of the translation furnished for the purposes of international preliminary examination(under Rules
	Ш	the language of the translation furnished for the purposes of file-filational premintary examination functions 55.2 and/or 55.3).
2	117:4	h regard to any nucleotide and/or amino acid sequence disclosed in the international application, the
٤.	. w.u. inter	national preliminary examination was carried out on the basis of the sequence listing:
	\square	contained in the international application in printed form.
		filed together with the international application in computer readable form.
	\vdash	
	\mathbb{H}	furnished subsequently to this Authority in written form.
	H	furnished subsequently to this Authority in computer readable form.
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
	$\overline{}$	
	Ш	The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4.	. 🔼	The amendments have resulted in the cancellation of:
		the description, pages NONE
		the claims, Nos. NONE
		the drawings, sheets/fig NONE
5		This report has been established as if (some of) the amendments had not been made, since they have been considered to go
		beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
tl	his ren	icement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to it ort as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.
*	Ann	replacement sixes containing sixen with marking made as a system in the sixen and a sixen

Form PCT/IPEA/409 (Box 1) (July 1998)



International application No. PCT/US00/08519

INTERNATIONAL PRELIMINARY EXAMINATION REPORT V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability;

citations and explanations supporting such statement 1. STATEMENT YES Claims 1-20 Novelty (N) Claims NONE YES Claims 1-11, 13, 15 and 20 Inventive Step (IS) Claims 12, 14, 16-19 YES Claims 1-20 Industrial Applicability (IA) NO Claims NONE

Claims 1-20 meet the criteria for novelty under PCT Article 33(2), because the prior art does not disclose the polypeptide of SEQ ID NO:2 or methods of treatment to inhibit platelet function utilizing the polypeptide, as claimed by Applicants.

Claims 1-11, 13, 15 and 20 meet the criteria for novelty under PCT Article 33(3), because the prior art does not teach the polypeptide of SEQ ID NO:2 or methods of treatment to inhibit platelet function utilizing the polypeptide, as set forth in these claims.

Claims 12, 14 and 16-19 lack an inventive step under PCT Article 33(3) as being obvious over PRITCHARD et al. (WO 95/12615) in view of FURMIDGE et al. (Parasitology (1995) 112:81-87). PRITCHARD et al. teach the pharmaceutical use of derivatives of excretory-secretory(ES) products of Necator americanus, particularly as an inhibitor of platelet aggregation. However, the reference does not teach or suggest mechanism by which these proteins inhibit platelet aggregation. FURMIDGE et al. teach mechanisms by which the ES products of N. americanus inhibit platelet aggregation. Specifically, the references indicate that the proteins interfere with the interaction of fibrinogen with platelet allbB3, which Applicant has referred to as GPIIb/IIIa.

Claims 1-20 meet the criteria for industrial applicability as defined by PCT Article 33(4).

Form PCT/IPEA/409 (Box V) (July 1998)



15 C 1



INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/08519

_						
A. CLASSIFICATION OF SUBJECT MATTER IPC(7) :C07K 1/00, 14/00; A61K 38/00 US CL :514/2, 822; 530/350						
	According to International Patent Classification (IPC) or to both national classification and IPC					
	LDS SEARCHED					
1	documentation searched (classification system follow	wed by classification symbols)				
U.S. :	514/2, 822; 530/350					
Documenta	Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
	Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Extra Sheet.					
c. poc	CUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.			
Y 	WO 95/12615 A1 (UNIVERSITY (1995 (11/05/1995), see entire document	OF NOTTINGHAM) 11 May	12 and 16-19			
A	p. 12, claim 7, and Figure 4.		1-20			
Y	FURMIDGE et al. The anti-haemostatic strategies of the human hookworm <i>Necator americanus</i> . Parasitology. 1995, Vol. 112, pages		12, 14, and 16-19			
	81-87, especially page 84, figure 3, a	nd page 86.	1-20			
Α						
Further documents are listed in the continuation of Box C. See patent family annex.						
	cial categories of cited documents: ument defining the general state of the art which is not considered	"T" later document published after the integrated and not in conflict with the app	acation but cited to understand			
to b	e of particular relevance	the principle of theory underlying the	invention			
	ier document published on or after the international filing date ument which may throw doubts on priority claim(s) or which is	"X" document of particular relevance; the considered novel or cannot be considered when the document is taken alone	e claimed invention cannot be red to involve an inventive step			
cite	d to establish the publication date of another citation or other cial reason (as specified)	'Y' document of particular relevance; th	c claimed invention arrange by			
O* docs	ument referring to an oral disclosure, use, exhibition or other	considered to involve an inventive combined with one or more other such being obvious to a person skilled in t	step when the document is a documents, such combination			
P* document published prior to the international filing date but later than the priority date claimed		*&* document member of the same patent	family			
Date of the actual completion of the international search Date of mailing of the international search report			rch report			
14 JUNE 2000		05 JUL 2	0 00			
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks		Authorized officer	_			
Box PCT Washington, D.C. 20231		HOLLY SCHNIZER)			
acsimile No. (703) 305-3230		Telephone No. (703) 308-0106	<i>پ</i> ر			

Form PCT/ISA/210 (second sheet) (July 1998)*





INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/08519

B. FIELDS SEARCHED Electronic data bases consulted (Name of data base and where practicable terms used):					
STN (MEDLINE, BIOSIS, CAPLUS); EAST; search terms: GPIIb/IIIa, GPIa/IIa, fibrinogen, collagen, ancyclostoma duodenale, ancyclostoma ceylanicum, necator americus, ancyclostoma canimum, hookworm, platelet inhibition, epinephrine, thrombin, ADP, apyrase.					
·					